EPSON

Material Safety Data Sheet

1. Identification of The Substance/Preparation and of The Company/Undertaking

1.1. Identification of the preparation: Epson Ink Cartridge T6241

1.2. Use of the substance/preparation: Inkjet Printing

1.3. Company/undertaking identification

Manufacturer/Distributor: SEIKO EPSON CORPORATION

Address: 80 Harashinden, Hirooka,
Shiojiri-shi, Nagano-ken, 399-0785
JAPAN

TEL: +81-263-52-2552 *FAX:* +81-263-53-3702

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1.4. Emergency telephone: +81-263-52-2552 (Mon-Fri, 9AM-5PM JST)

2. Hazard Identification

2.1. Emergency Overview:

Ink component is a black liquid that causes eye, nose or throat irritation, and that effects anesthesia, if inhales. Ink may flash, when under high temperature. Avoid contact with eyes or clothing. In the case of skin contact, wash with soap and water. Keep out of reach of children.

2.2. Potential Health Effects:

Eyes: Ink contact with eye will be irritating. See Section 11 for Toxicology.

Skin: Ink contact with skin may cause minimally irritation. See Section 11 for Toxicology.

Inhalation: Intentional exposure to ink vapors (mist) will cause respiratory irritation and anesthesia. See Section 11 for Toxicology.

Ingestion: May cause upset stomach. See Section 11 for Toxicology.

3. Composition/Information on Ingredients

This is a solvent ink formulation

Ink Composition	CAS No.	% By Weight
Carbon Black	1333-86-4	1 – 5
Synthetic polymer	–	1 – 5
Diethylene glycol diethyl ether	112-36-7	55 – 65
Gamma-butyrolactone	96-48-0	10 – 20
Tetraethylene glycol, dimethyl ether	143-24-8	10 – 20
Tetraethylene glocol, monobutyl ether	1559-34-8	1 – 5
Additives	–	1-5

4. First Aid Measures

4.1. Eyes: Immediately flush with room temperature, low pressure and clean water for at least 15 minutes. Seek medical attention if eye irritation continues.

4.2. Skin: Wash surface areas with soap and water. Wash soiled clothing before rewearing. Consult a physician if irritation continues.

4.3. Inhalation: Remove subject to ventilated fresh air. If not breathing, give artificial respiration right away. If breathing is difficult, give oxygen. Seek immediate medical attention.

4.4. Ingestion: Seek medical advice; and attention if stomach continues to be upset.

5. Fire Fighting Measures

5.1. Flammability: Combustible liquid under Hazard Communication Standard (HCS, U.S.A). See Section 9 for Flash Point.

5.2. Extinguishing Media: Water spray, dry chemical, carbon dioxide or, alcohol foam

5.3. Fire Fighting Instructions: Extinguish to use fire fighting media or plentiful fog water. Put protection wear without fail in case of fire fighting work; do not work in the leeward.

6. Accidental Release Measures

6.1. Personal protections: Removed the person of the leeward. Keep away the person from periphery of the place of the leakage. Ventilate sufficiently during clean-up in case of inside of a house.

6.2. Methods for cleaning up: If a spill occurs, use sponges to wipe-up ink, then rinse area with damp cloth. Place waste in closed container for disposal. Do not dispose of waste to the sewer. Wash hands with soap and water.

7. Handling And Storage

7.1. Handling: Use proper ventilation and no fire in work place. Put protection wear that has electrical conductivity in case of work. Keep out of reach of children and do not drink ink. Do not dismantle cartridge. Make sure cartridge is dry before insertion into printer housing.

7.2. Storage: Do not store the cartridge in high or freezing temperatures. Keep cartridge out of direct sunlight. Do not store cartridges with oxidizing agents or explosives.

7.3. Specific use(s): Not specified

8. Exposure Controls and Personal Protection

8.1. Exposure limit values: No data available

8.2. Exposure Controls:

8.2.1. Occupational exposure control

Diethylene glycol diethyl ether (CAS No. 112-36-7)

California OELs (California Code of Regulations, Title 8, Section 5155. Airborne Contaminants)

The 8-Hour TWA Exposure Value: 5 ppm

The 8-Hour TWA Exposure Value: 33 mg/m^3

8.2.1.1. Respiratory protection

Not required under suitable use as setting the cartridge on the printer.

8.2.1.2. Hand protection

Not required under suitable use as setting the cartridge on the printer.

8.2.1.3. Eye protection

Not required under suitable use as setting the cartridge on the printer.

8.2.1.4. Skin protection

Not required under suitable use as setting the cartridge on the printer.

8.2.2. Environmental exposure control

Not established

8.3. Engineering Controls

Proper ventilation

9. Physical and Chemical Properties of Ink Formulation

9.1. General information

Appearance:	Black Liquid
Odor:	Slightly

9.2. Important health, safety and environmental information

pH:	Not applicable
Boiling point:	No data available
Melting point:	No data available
Flash point:	about 71°C (Closed cup)
Auto flammability:	None
Explosive properties:	1.4~6.9v/v% as Gamma-butyrolactone
Oxidizing properties:	None
Vapor density:	Greater than 1 (air = 1)
Relative density:	No data available
Solubility in water:	Soluble
Solubility in fat:	No data available
Partition coefficient:	No data available
Viscosity:	No data available

9.3. Other information Not specified

10. Stability and Reactivity

Stability	Stable under normal temperature
Hazardous polymerization	No data available

10.1. Conditions to avoid: High and freezing temperatures

10.2. Materials to avoid: Oxidizers and explosives

10.3. Hazardous decomposition products: No data available

11. Toxicology and Health Hazards

*Based on toxicology data of chemically similar material

Routes Of Overexposure: Eye, skin, inhalation, and oral

Acute Health Hazards:

- Overexposure of eye surface to ink may be mildly irritating
- Overexposure of skin to ink contact may cause irritation and in some people swelling and redness
- Intentional inhalation overexposure to ink vapors may result in respiratory tract irritation and anesthesia
- Intentional or accidental oral ingestion may cause an upset stomach

Chronic Health Hazards: None known

Mugtagenicity: Negative (by Ames Test)*

Carcinogenicity: With excessive exposure, carbon black has been listed as a possible human carcinogen. However, as engineered within this ink cartridge, emissions to air of carbon black during

normal printing use have not been found. IARC, the International Agency for Research on Cancer, has found printing inks to be not classifiable as human carcinogens as group 3.

Toxicity Data:	Oral LD_{50}	Dermal LD_{50}	Inhalant LC_{50}
	> 2500 mg/kg (Rat)*	> 2000 mg/kg (Rat)*	No data available

Eye irritating: Moderate irritant (Rabbit, OECD 405)*
Skin irritating: Mild irritant (Rabbit, OECD 404)*
Skin sensitizing: Non-sensitizer (LLNA, OECD 429)*

12. Ecological Information

12.1. Ecotoxicity No data available on the adverse effects of this ink on the environment
12.2. Mobility No data available on the adverse effects of this ink on the environment
12.3. Presistence and degradability
No data available on the adverse effects of this ink on the environment
12.4. Bioaccumulative potential
No data available on the adverse effects of this ink on the environment
12.5. Other adverse effects No data available

13. Disposal Considerations

Disposal should be in accordance with federal, state, and local requirements.

14. Transportation Information

UN Class/UN Number: Not applicable

15. Regulatory Considerations

US Regulation:

TSCA Section 4(a) Final Test Rules Regulated	Not regulated
TSCA Section 8(a) Preliminary Assessment Information Rule(PAIR)	Not regulated
TSCA Section 8(a) Inventory Update Rule:	
Subject to a Special Regulatory Action under TSCA (2002 EPA Instructions, App. B)	Not regulated
TSCA Section 12(b) One-Time Export Notification Regulated	Not regulated
California Proposition 65:	Not regulated

EU Information
Symbols and indication according to 1999/45/EC:
This ink does not meet the criteria for classification as dangerous.

16. Other Information

This "Material Safety Data Sheet" contains health, safety, and environmental information. It does not replace any precautionary language or use and disposal information which accompanies the product. The information contained herein is believed to be accurate at the time of preparation, but should only be used as a guide. It is subject to revision from time to time. EPSON does not warrant the completeness or accuracy of the information contained herein.